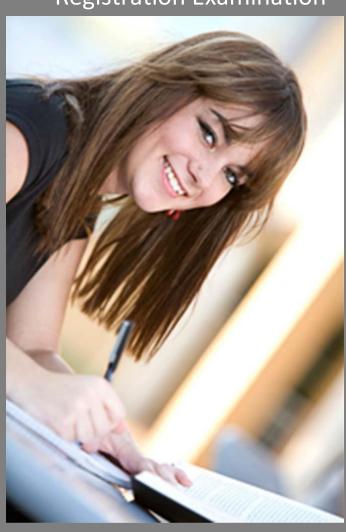
# L.A.R.E. Orientation

Understanding the Landscape Architect Registration Examination







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# **Preface**

This examination information booklet supersedes all information previously distributed concerning the Landscape Architect Registration Examination (L.A.R.E.). The material in this booklet is for use on the Landscape Architect Registration Examination (L.A.R.E.) only.

This booklet may not be brought into the examination.

### What is CLARB? Why is CLARB involved with the L.A.R.E.?

CLARB is a non-profit association and its members are the state and provincial registration boards that regulate the profession of landscape architecture.

CLARB's mission is to foster the public health, safety and welfare related to the use and protection of the natural and built environment affected by the practice of landscape architecture. To accomplish this mission, CLARB provides programs and services to its members that ensure consistency in competency of landscape architects and others involved in making decisions affecting the development and conservation of land by:

- Establishing and promoting standards for their professional competency and conduct, and examining and certifying their competency.
- Providing information and resources to those affected by the practice and regulation of landscape architecture thereby assuring that they are well informed, educated and empowered regarding the value and benefits of the licensed practice of landscape architecture.

#### What is the L.A.R.E.?

The Landscape Architect Registration Examination (L.A.R.E.) is a four-part fully computerized examination designed to determine whether applicants for landscape architectural licensure possess sufficient knowledge, skills and abilities to provide landscape architectural services without endangering the health, safety and welfare of the public. It is prepared and scored by CLARB in accordance with all current standards for fairness and quality of licensure exams.

All sections of the L.A.R.E. are administered by CLARB and all candidates register for the exam on the CLARB website. While the requirements to sit for the exam vary by jurisdiction, the exam, the administration dates and procedures and the passing standards are the same in every jurisdiction.

#### How is the content of the L.A.R.E. determined?

The content of the L.A.R.E. is based on the results of a scientific "job analysis" survey conducted every five to seven years. The most recent survey was administered in early 2016 in which more than 5548 practicing landscape architects from the United States and Canada participated. The survey results were analyzed by a group of subject matter experts, comprised of licensed landscape architects representing diversity (areas of practice, geographic) of the profession.

Survey respondents were asked to rate all job tasks on three separate scales: how frequently the tasks were performed, how important the tasks were to successful performance of the job, and whether successful performance of each task was required at initial licensure. Overall, the tasks, and subsequent knowledge, that are performed most often are considered the most important and are required at the initial point of licensure and thus form the basis of the L.A.R.E.

#### When and where is the L.A.R.E. administered?

The L.A.R.E. is administered three times per year over two week windows. CLARB partners with Pearson VUE Test Centers to administer the L.A.R.E. The exam can be taken in any Pearson VUE Test Center that offers the L.A.R.E. regardless of where the candidate wishes to become initially licensed.

# **Special Accommodations**

## Registering for the Exam with Special Accommodations

CLARB follows the standards set by the Americans with Disabilities Act (ADA) for accommodations for disabled candidates. Should you require special accommodations for a disability, please contact CLARB as soon as possible to ensure that the testing environment will meet your needs.

#### Scheduling a Test Appointment with Special Accommodations

Candidates who test with special accommodations cannot schedule a test appointment with Pearson VUE via the internet. Once you have registered for the L.A.R.E., please contact CLARB to obtain information on how to schedule your testing appointment.

### The L.A.R.E. Structure

### **Understanding the Content of the L.A.R.E.**

The Landscape Architect Registration Examination (L.A.R.E) tests applicants for the knowledge and skills required to practice those aspects of landscape architecture that impact the health, safety and welfare of the public.

#### **Exam Content**

This guide describes the content that will be tested under each section of the examination. Subsection breakdowns indicate a more detailed description of specific subject matter found on the examination as well as the percentage of items that will be included in that subsection topic.

For additional information about the exam including requirements to take the test, the registration process and the scoring process, please visit the <u>"Take the Exam"</u> section of the CLARB website or <u>contact CLARB</u>.

# **Section 1 - Project and Construction Management**

85 items consisting of multiple-choice and multiple-response questions; 3 hours seat time, 2 ½ hours for exam

Pre-Project Management: 10%	Project Management: 30%	Bidding: 20%	Construction: 30%	Maintenance: 10%
<ul> <li>Select Project Team</li> <li>Develop Contract</li> <li>Negotiate Contract</li> <li>Prepare RFPs or RFQs</li> <li>Determine Project Scope, Schedule, and Budget</li> </ul>	<ul> <li>Manage Project Team</li> <li>Manage Project Scope, Schedule, and Budget</li> <li>Determine Common Goals and Objectives</li> <li>Establish Quality Control Procedures and Conduct Quality Control Review</li> <li>Facilitate Meetings Coordinate Work of/with Other Disciplines Document Design Decisions and Project Communication</li> <li>Execute Records Retention Policy</li> <li>Facilitate Client Review and Coordination</li> <li>Obtain Permits</li> <li>Prepare Cost Estimates</li> <li>Prepare Project Deliverables</li> </ul>	<ul> <li>Develop Bidding Criteria</li> <li>Prepare and Issue         Addenda</li> <li>Facilitate Meetings</li> <li>Evaluate Bids and Make         Recommendations</li> <li>Identify Delivery         Methods</li> <li>Evaluate Contractor         Qualifications</li> <li>Assist with Construction         Contract Execution and         Administration</li> </ul>	<ul> <li>Respond to RFIs</li> <li>Coordinate with Contractors</li> <li>Facilitate Pre-Construction         Meeting</li> <li>Document Pre-Construction         Existing Conditions</li> <li>Review Submittals</li> <li>Prepare Change Orders</li> <li>Conduct and Document         Construction-related Actions</li> <li>Prepare Drawing Revisions or         Clarification Sketches</li> <li>Review and Certify         Applications for Payment</li> <li>Attend Substantial         Completion (practical         completion) Walkthrough and         Prepare Punch List (deficiency         list)</li> <li>Attend Final Completion         Walkthrough</li> <li>Prepare As-Built (record)         Drawings</li> <li>Conduct Warranty Review</li> <li>Conduct Project Close-out</li> <li>Collect and Analyze         Performance Metrics</li> </ul>	

# Section 2 – Inventory and Analysis

70 items consisting of multiple-choice and multiple-response, 2 ½ hours seat time, 2 hours for the exam

Site Inventory: 35%	Physical Analysis: 40%	Contextual Analysis: 25%
<ul> <li>Site Inventory: 35%</li> <li>Determine Applicable Codes, Regulations, and Permitting Requirements</li> <li>Collect Contextual Data</li> <li>Gather Stakeholder Input</li> <li>Identify Policy Objectives</li> <li>Conduct Project Related Research</li> <li>Conduct Onsite Investigation and Fieldwork</li> </ul>	<ul> <li>Physical Analysis: 40%</li> <li>Determine Appropriate Types of Analyses</li> <li>Perform Circulation Analysis</li> <li>Interpret Utility Analysis</li> <li>Perform Visual Resource Analysis</li> <li>Perform Micro and Macro Climate Analysis</li> <li>Perform Hydrological Analysis</li> <li>Perform Vegetation Analysis</li> </ul>	<ul> <li>Contextual Analysis: 25%</li> <li>Analyze Codes, Regulations, and Permitting Requirements for Design Impact</li> <li>Interpret Cultural, Historical, and Archeological Analysis</li> <li>Interpret Social Analysis</li> <li>Interpret Economic Analysis</li> <li>Analyze Contextual Data</li> </ul>
<ul> <li>Document Site Inventory</li> <li>Determine Performance Metrics</li> </ul>	<ul> <li>Interpret Ecological Analysis</li> <li>Perform Topographical Analysis</li> <li>Interpret Soil and Geotechnical/Geological Analysis</li> <li>Interpret Environmental Studies</li> </ul>	Analyze Stakeholder Feedback

# Section 3 – Design

85 items consisting of advanced item types, multiple-choice and multiple-response questions; 4 hours seat time,

# 3 ½ hours for the exam

Stakeholder Process: 9%	Master Planning: 45%	Site Design: 46%
<ul> <li>Design and Execute Public Participation Process</li> <li>Prioritize Stakeholder Goals</li> <li>Initiate Communication Strategy</li> <li>Synthesize Stakeholder Feedback</li> <li>Communicate Concept(s)/Schematic(s)</li> </ul>	<ul> <li>Perform Site Analysis and Determine Opportunities and Constraints</li> <li>Develop Vision or Framework Plan</li> <li>Develop and Conduct Urban Plan</li> <li>Develop Land Use Plan</li> <li>Develop Strategic Implementation Plan</li> <li>Develop Site Master Plan</li> <li>Develop Historic/Cultural Restoration and Preservation Plan</li> <li>Develop Parks, Open Space, and Trails Master Plan</li> <li>Develop Design Guidelines</li> <li>Develop a Feasibility Study</li> <li>Develop Redevelopment Plan</li> <li>Develop Environmental Resources Plan</li> <li>Develop Multi-modal Transportation Plan</li> </ul>	<ul> <li>Synthesize and Apply the Site Analysis</li> <li>Develop and Refine the Program</li> <li>Create the Basis for the Design</li> <li>Create Conceptual Design Alternatives and Scenarios</li> <li>Evaluate Design Alternatives</li> <li>Refine and Synthesize Concept Alternative</li> <li>Develop Schematic Design</li> <li>Prepare Preliminary Quantities and Cost Estimate</li> <li>Prepare Presentation Drawings and Communication Tools</li> <li>Compile Materials Sample Board</li> <li>Identify and Develop Performance Metrics</li> </ul>

# Section 4 – Grading, Drainage and Construction Documentation

105 items consisting of advanced item types, multiple-choice and multiple-response questions; 4 % hours seat time, 4 hours for the exam

## **Exam Methodology**

The L.A.R.E. consists of four computer-based exam sections. Each section is independent of the others. Sections 1 and 2 consist of multiple-choice and multiple-response questions and Sections 3 and 4 consist of advanced item types ("drag and place" and "hot spot" items), multiple-choice and multiple-response questions. A demonstration video of the four item types can be found in the <u>"Prepare for the Exam"</u> section of the CLARB website.

This guide details the knowledge areas and total number of items for each section. The score for each of the exam sections is determined by the number of questions answered correctly. Items left blank are counted as incorrect. Each item addresses one of the areas of knowledge described in the content of the exam and is worth one point each.

During and immediately following the exam administration we collect candidate feedback on exam questions. We also review the item statistics to ensure the items all performed properly. Both candidate feedback and item statistics are reviewed and any adjustments made to the items such as removing the item from scoring are made prior to the score calculations. The exam data and scoring are then thoroughly run through quality control procedures by psychometric professionals.

#### **Pretest Items**

All exams include a limited number of pretest items that will NOT be scored and will NOT have an impact on your results. This is common practice within high-stakes testing and allows CLARB to evaluate the items for potential use in future exams. Pretest items are randomly placed throughout the exam and are not identifiable as pretest items.

#### Item types

There are four item types that can be presented on the L.A.R.E.:

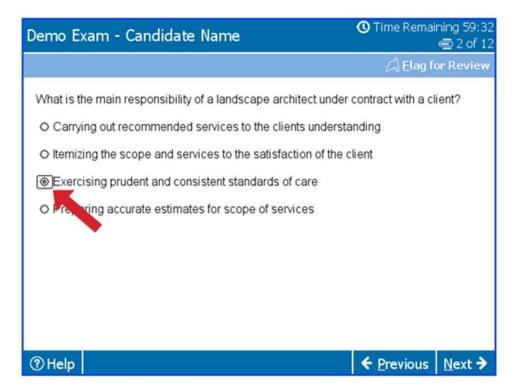
- Multiple Choice You will select ONE answer.
- Multiple Response You will select TWO OR MORE answers.
- Hot Spot You will be required to select the most appropriate location by clicking directly on the plan.
- Drag and Place You will be required to choose the appropriate project element(s) and place the
  element on the site.

More information about each item type is presented next and can also be experienced through the video on the <u>"Prepare for the Exam"</u> page of the CLARB website.

# **Multiple Choice Items**

Select an answer by clicking on the circle to the left of the answer.

To change your answer, select another answer.

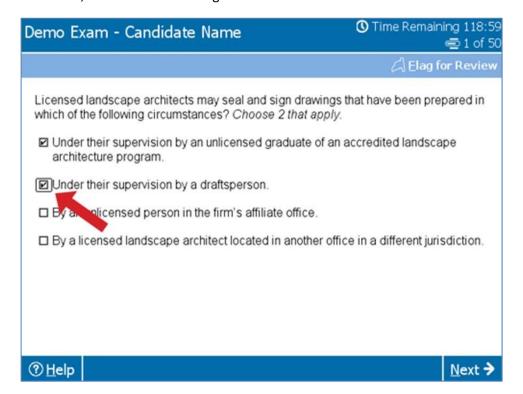


### **Multiple-response Items**

This item type will ask you to "choose all that apply" or to "choose 2" or "choose 3" etc.

Select **two** or more of the answer choices by clicking on the box to the left of the answer or by clicking on the answer itself.

To remove a selection, click on the answer again.



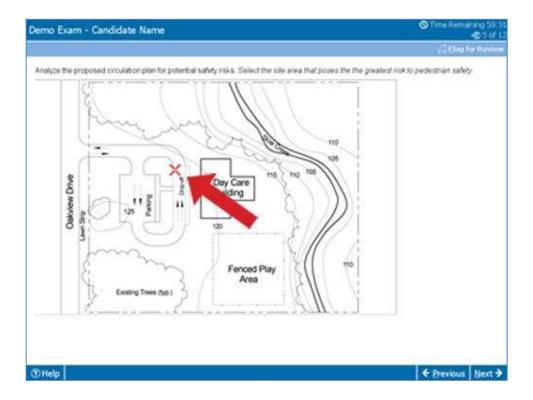
### **Hot Spot Items**

This item type will require you to **select** the most appropriate location on a site or proposed plan to satisfy the question requirements.

Select the most appropriate location by moving your mouse cursor to the area of the plan that you would like to choose and then clicking the left mouse button.

A red "X" will remain on the plan to indicate your selection.

To change your answer, click on another area of the plan. This will remove your initial selection and indicate a different answer selection.



### **Drag and Place Items**

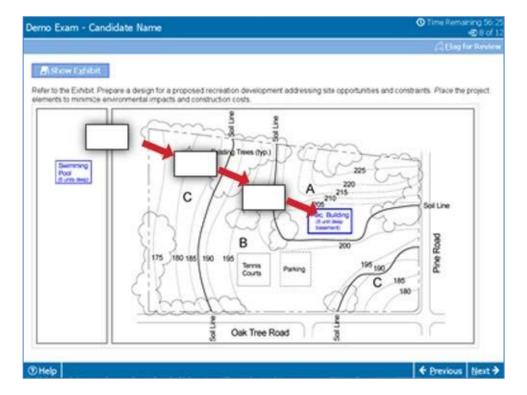
This item type will require you to select the project element(s) and *place* the element(s) on a site.

Select the project element(s) from the project element area which is located on the left side of the screen by moving your mouse cursor over the element and by **clicking and holding** the left mouse button.

While holding the left mouse button, you can use the mouse to move the project element to your selected location on the site.

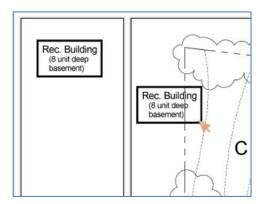
Releasing the left mouse button will "drop" the project element on your selected location.

You may change your selected location by moving the mouse cursor over the project element and following the steps above to move it to a different location.



You may be required to use multiple copies of each project element to answer the item.

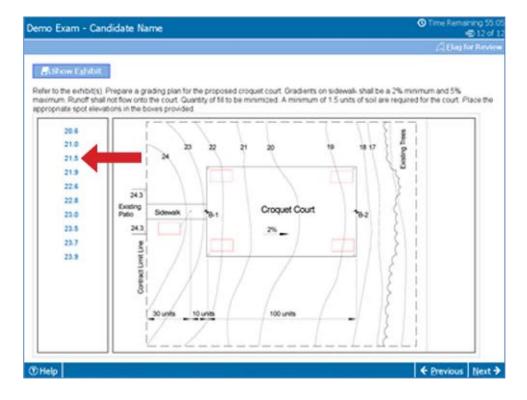
When you move the project element, additional copies of the element will remain in the project element area should you need to use multiple copies of the same project element.



**Important Notice:** Not all the project elements may be required to answer the item.

**Place** the appropriate project element(s) on the site and leave the remaining project elements within the project element area.

Placing unnecessary project elements on the site will result in an incorrect answer for the item.



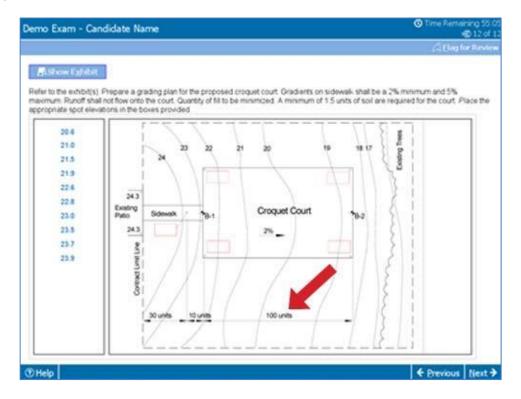
#### Measurement

Due to the fact that you will be unable to measure components in an item, dimensions will be provided to you should you need them for calculations.

To avoid confusion between Imperial measurement (feet and inches) and Metric, many items will be dimensioned using a generic scale (units).

Use the number of units to calculate specific measurements that may be needed to answer the item.

Do not try to convert the "units" to either feet or meters to answer the item.



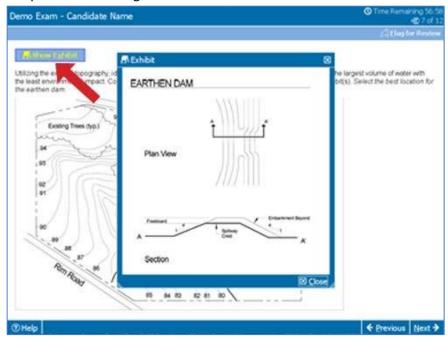
#### **Exhibits**

In order to answer some of the items, you will need to consider additional information called exhibits.

Should additional information be required the item will direct you to "Refer to the exhibit(s)".

To see the exhibits, move your mouse cursor over the **Show Exhibit button** and click the left mouse button.

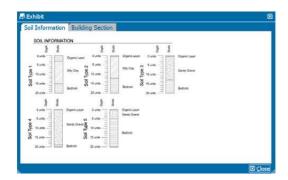
This will result in a pop-up window appearing that contains one or more tabs of stimuli information that you will need to review prior to answering the item.



The exhibit window can be moved and resized to allow you to review the exhibit information at the same time as you review the item.

Should there be multiple exhibits, move your mouse cursor to each tab at the top of the exhibit window and click the left mouse button to open additional exhibit screens.

To close the exhibit window, click on the "X" in the upper right corner of the exhibit window.

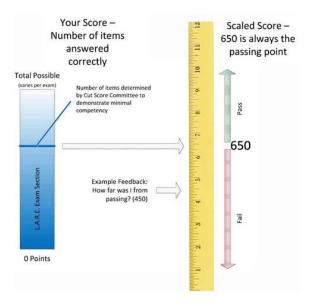


# **Exam Results Reporting**

Exam results for all sections of the L.A.R.E. are not reported immediately after completing the exam due to the analysis performed on the items to ensure that the items are correct, fair and accurately address the subject matter being tested. CLARB's testing experts look at the difficulty of the items, the response patterns by candidates and the ability of the items to discriminate between candidates of differing ability levels.

Exam results for all sections of the L.A.R.E. will be available on the CLARB website approximately 4-6 weeks after the last day of the exam administration.

Exam results are reported as pass or fail. If a "Fail" result is received, a number representing a scaled score will also be received. The scaled score provides candidates with a performance indicator demonstrating how close they were to the passing point. For each section, candidates must obtain a scaled score of at least 650 to pass. A scaled score of 640, for example, would indicate that a candidate was close to passing.



CLARB utilizes scaled scoring for two key reasons:

- 1. To report performance on the L.A.R.E. in a consistent way even though the number of items in each section varies, and;
- 2. It is a "best practice" of the testing industry.

## **Validity of Scores**

The CLARB program assures the validity of scores reported for CLARB examinations by every means available. Your scores may be classified as indeterminate if the scores are at or above the passing level and the CLARB program cannot certify that they represent a valid measure of your knowledge or competence as sampled by the examination. The CLARB program may make such a determination when aberrancies in performance are detected for which there is no reasonable and satisfactory explanation. A classification of indeterminate may result from exam impropriety (see following section) or from other factors, such as unexplained inconsistency in performance.

The performance of all examinees is monitored and may be analyzed statistically to detect aberrancies indicating that your scores may be indeterminate. In addition, evidence of exam impropriety may suggest that your scores do not represent a valid measure of your knowledge or competence as sampled by the examination. In these circumstances, your score report may be delayed, pending completion of further analysis and investigation. If your score report is delayed, you will be notified. You will have an opportunity to provide information that you consider relevant. After review and analysis of all available information, scores will be classified as valid and will be reported, or scores will be classified as indeterminate. If the scores are classified as indeterminate, you will be advised of the options for retaking the examination. Scores classified as indeterminate do not appear on your record; rather, an annotation indicates that the scores were classified as indeterminate. Scores classified as indeterminate will not be reported to anyone. Anyone who has received a report of scores that are later classified as indeterminate will be notified of the indeterminate classification. If exam impropriety appears to have contributed to a decision that your scores are indeterminate, action will also be taken as described in the Examples of Exam Impropriety section.

#### Completing the L.A.R.E.

If a candidate fails any section of the exam, he/she needs to retake that section in future administration(s) in an attempt to obtain a passing score. A candidate may usually retake a section of the exam as many times as necessary in order to achieve a passing score; however, some jurisdictions limit the number of retakes, so this information should be verified with the registration board in the jurisdiction where you are seeking initial licensure.

#### L.A.R.E. Rules of Conduct

If a candidate knowingly violates or attempts to circumvent the rules and procedures of the exam as established by CLARB, the results of that exam may not be scored or accepted. CLARB reserves the right to take remedial action—including, but not limited to, barring the candidate from future testing, canceling the candidate's exam scores, or filing of civil or criminal charges. If a candidate's scores are canceled, they will not be reported and the associated fees will not be refunded. The candidate will be notified of the alleged violation(s) and be given an opportunity to provide evidence to the contrary and reasons that the exam score(s) should not be canceled or withheld.

Exam impropriety includes any action by applicants, examiners, potential applicants or others when solicited by an applicant and/or examinee that subverts or attempts to subvert the examination process.

Although tests are administered under strict supervision and security measures, testing irregularities may sometimes occur. Candidates are encouraged to contact CLARB as soon as possible to report any behavior that violates exam standards and may lead to an invalid score. All information will be held in strict confidence.

## **Examples of Exam Impropriety**

The following are examples of exam improprieties. This list is not meant to be exhaustive and CLARB reserves the right to take action on other items considered to be an attempt to gain unfair advantage or circumvent the intent of the exam.

- attempting to take the exam for someone else or having someone else take the exam or any portion of the exam for you
- failing to provide acceptable identification
- obtaining improper access to the exam, a part of the exam or information about the exam
- using a telephone or cellular phone during the exam session or during breaks
- using any aids in connection with the exam other than those provided at the exam site; for example: pagers, beepers, calculators, watch calculators, books, pamphlets, notes, stereos or radios with headphones, telephones, cell phones, watch alarms (including those with flashing lights or alarm sounds), stop watches, dictionaries, translators and any hand-held electronic or photographic devices
- creating a disturbance (disruptive behavior in any form will not be tolerated; the exam administrator/supervisor has sole discretion in determining what constitutes disruptive behavior)
- attempting to give or receive assistance or otherwise communicate in any manner with another person about the content of the exam during the administration, during breaks or after the exam
- removing or attempting to remove exam content from the test center; under no circumstances may exam content or any part of the exam content be removed, reproduced and/or disclosed by any means (e.g., hard copy, verbally, electronically) to any person or entity
- tampering with a computer
- attempting to remove scratch paper from the exam room
- bringing a weapon or firearm into the computer laboratory
- leaving the exam center vicinity during the exam session or during breaks

- leaving the exam room without permission
- taking excessive or extended unscheduled breaks during the test session; exam center administrator supervisors are required to strictly monitor unscheduled breaks and report examinees that take excessive or extended breaks
- failing to follow any of the exam administration regulations contained in any examination orientation guides, given by the exam administrator/supervisor, or specified in any exam materials
- seeking and/or obtaining unauthorized access to examination material
- providing false information or making false statements on or in connection with application forms, or other CLARB related documents
- taking an examination without being eligible for it or attempting to do so
- making notes of any kind while in the secure areas of the test center except on the writing material provided at the test center for this purpose
- failing to adhere to any CLARB policy, procedure or rule, including instructions of the test center staff
- verbal or physical harassment of test center staff or other disruptive or unprofessional behavior at the test center (the exam administrator/supervisor has the sole discretion in determining what constitutes disruptive and/or unprofessional behavior)
- possessing any unauthorized material, including but not limited to, photographic equipment, communication or recording devices, electronic paging devices, cellular telephones, dictionaries, translators, books, notes, calculators, watch alarms, stereos or radios with or without headphones or stop watches
- altering or misrepresenting examination scores
- any unauthorized reproduction by any means, including reconstruction through memorization, and/or dissemination of copyrighted examination materials by any means, including the Internet
- communicating or attempting to communicate about specific test items, cases, and/or answers with another examinee, potential examinee, or formal or informal test preparation group at any time before, during or after an examination
- revealing examination content to anyone during, or after the exam administration, including but not limited to social networking sites and other online forums

NOTE: Looking in the direction of another examinee's computer monitor or talking to another examinee during the examination may be reported as evidence of giving, receiving or obtaining unauthorized assistance. The report may result in a determination of exam impropriety. Discussion of examination content or answers on the Internet may also result in a determination of exam impropriety.

If information received suggests that exam impropriety has occurred, statistical analyses may be conducted and additional information may be gathered.

You will be advised of the alleged exam impropriety, and you will have an opportunity to provide information that you consider relevant to the evaluation of the allegation. Your scores may be withheld, if they have not been reported previously. Applications may not be processed, and you may not be permitted to take subsequent examinations until a final decision regarding exam impropriety is made. If it is determined that you engaged in exam impropriety, information regarding this determination becomes part of your CLARB

record. Your score report (if applicable) and CLARB record will contain a notation regarding the exam impropriety. Information about the exam impropriety will be provided to third parties that receive or have received your CLARB record. If it is determined that the exam impropriety is egregious and/or threatens the integrity of the examination system, you may be barred from future CLARB examinations and/or special administrative procedures may be implemented for your future examinations. The CLARB program also reserves the right to take such actions when information regarding behavior of examinees on predecessor examinations indicates such actions may be necessary to ensure the security of the L.A.R.E.

# **Examination Materials and What to Expect at the Testing Center**

# Security

**Learn more about Pearson VUE's security procedures.** 

## Required

You must present <u>two forms of valid and current</u> identification when arriving at the testing center.

At least one must be an Official ID with a photograph and the other may be a secondary ID.

The name on the ID's must match the name under which you registered for the exam.

If you have had a name change between exam registration and administration, you must contact CLARB prior to arriving at the test center. You will be required to bring validation of your name change with you to the test center.

Acceptable forms of government-issued ID with photograph:

- Driver's license
- Military ID card
- Valid passport
- State ID card

Acceptable forms of secondary ID:

- Credit card
- Check, ATM or Debit card

**NOTE:** If the test center questions the ID presented, you may be asked for additional proof of identification. Access to the examination may be refused if the test center staff believes you have not sufficiently proven your identity. You will NOT be admitted into the examination without proper identification and there will be no refund of your test fee(s).



## **Provided**

- A calculator will be provided at the test center. Please request a calculator if you are not provided one upon check-in to the testing room.
- The test proctor will provide a notebook and marker to use as scratch paper.

#### **Prohibited**

- No items including reference material, calculators, pencils, pens, paper, drafting supplies, etc. will be allowed in the testing room.
- No personal items (including purses, fanny packs, food items) will be allowed in the testing room.
   Personal items must be left in a locker in the test center for test security purposes, so please limit what you bring to the examination center.
- You may not bring cellular phones, pagers, devices with a computer memory chip or any device with an alphanumeric keyboard (e.g., a language translation tool) to the test site.

#### **Additional Reference Information**

#### **Rules of Professional Conduct**

#### Competence

- (A) In engaging in the practice of landscape architecture, a registered landscape architect shall act with reasonable care and competence and shall apply the technical knowledge and skill which are ordinarily applied by registered landscape architects of good standing, practicing in the same locality.
- (B) In designing a project, a registered landscape architect shall take into account all applicable state and municipal building laws and regulations. While a registered landscape architect may rely on the advice of other professionals, (e.g., attorneys, engineers and other qualified persons) as to the intent and meaning of such regulations, once having obtained such advice, a registered landscape architect shall not knowingly design a project in violation of such laws and regulations.
- (C) A registered landscape architect shall undertake to perform professional services only when he or she, together with those whom the registered landscape architect may engage as consultants, is qualified by education, training and experience in the specific technical areas involved.
- (D) No individual shall be permitted to engage in the practice of landscape architecture if, in the Board's judgment, such individual's professional competence is substantially impaired by physical or mental disabilities.

#### Conflict of Interest

- (A) A registered landscape architect shall not accept compensation for his or her services from more than one party on a project unless the circumstances are fully disclosed to and agreed to by (such disclosure and agreement to be in writing) all interested parties.
- (B) If a registered landscape architect has any business association or direct or indirect financial interest which is substantial enough to influence his or her judgment in connection with his or her performance of professional services, the registered landscape architect shall fully disclose in writing to his or her client or employer the nature of the business association or financial interest, and, if the client of the employer objects to such association or financial interest, the registered landscape architect will either terminate such association or interest or offer to give up the commission or employment.
- (C) A registered landscape architect shall not solicit or accept compensation from material or equipment suppliers in return for specifying or endorsing their products.
- (D) When acting as the interpreter of building contract documents and the judge of contract performance, a registered landscape architect shall render decisions impartially, favoring neither party to the contract.

#### Full Disclosure

- (A) A registered landscape architect, making public statements on landscape architectural questions, shall disclose when he or she is being compensated for making such statements.
- (B) A registered landscape architect shall accurately represent to a prospective or existing client or employer his or her qualifications and the scope of his or her responsibility in connection with work for which he or she is claiming credit.
- (C) If, in the course of his or her work on a project, a registered landscape architect becomes aware of a decision taken by his or her employer or client, against such registered landscape architect's advice, which violates applicable state or municipal building laws and regulations and which will, in the registered landscape architect's judgment, materially and adversely affect the safety to the public of the finished project, the registered landscape architect shall:
  - 1. report the decision to the local building inspector or other public official charged with the enforcement of the applicable state, provincial or municipal building laws and regulations;
  - 2. refuse to consent to the decision; and
  - 3. in circumstances where the registered landscape architect reasonably believes that other such decisions will be taken, notwithstanding his or her objections, terminate his or her services with respect to the project. In the case of a termination in accordance with this clause (3), the registered landscape architect shall have no liability to his or her client or employer on account of such termination.
- (D) A registered landscape architect shall not deliberately make a materially false statement or deliberately fail to disclose a material fact requested in connection with his or her application for a registration or renewal thereof.
- (E) A registered landscape architect shall not assist the application for a registration of an individual known by the registered landscape architect to be unqualified in respect to education, training, experience or character.
- (F) A registered landscape architect possessing knowledge of a violation of the provisions set forth in these regulations by another registered landscape architect shall report such knowledge to the Board.

#### Compliance with Laws

- (A) A registered landscape architect shall not, while engaging in the practice of landscape architecture, knowingly violate any state, provincial or federal criminal law.
- (B) A registered landscape architect shall neither offer nor make any payment or gift to a government official (whether elected or appointed) with the intent of influencing the official's judgment in connection with a prospective or existing project in which the registered landscape architect is interested.

(C) A registered landscape architect shall comply with the registration laws and regulations governing his or her professional practice in any jurisdiction.

#### **Professional Conduct**

- (A) Each office in a jurisdiction maintained for the preparation of drawings, specifications, reports or other professional landscape architectural work shall have a registered landscape architect resident and regularly employed in that office having direct supervision of such work.
- (B) A registered landscape architect shall not sign or seal drawings, specifications, reports or other professional work for which he or she does not have direct professional knowledge and direct supervisory control; provided, however, that in the case of the portions of such professional work prepared by the registered landscape architect's consultants, registered in this jurisdiction, the registered landscape architect may sign or seal that portion of the professional work if the registered landscape architect has reviewed such portion, has coordinated its preparation, and intends to be responsible for its adequacy.
- (C) A registered landscape architect shall neither offer nor make any gifts, other than gifts of nominal value (including, for example, reasonable entertainment and hospitality), with the intent of influencing the judgment of an existing or prospective client in connection with a project in which the registered landscape architect is interested.
- (D) A registered landscape architect shall not engage in conduct involving fraud or wanton disregard of the rights of others.

# **Fasteners and Reinforcing List (for Section 4)**

The following is a list of fasteners and reinforcing materials that may appear in questions in Section 4 of the L.A.R.E. This list has been prepared by the CLARB Examination Committee. While the Committee believes this list will be of assistance to you in preparing for the L.A.R.E., no representation is made that a complete understanding of the materials on this list will ensure a passing grade on the examination, and no representation is made that the examination questions will be limited in scope to the list shown.

#### **BOLTS:**

Carriage Bolt Assembly

Eye Bolt

J-Bolt Assembly

L-shaped Anchor Bolt Assembly

Lag Bolt

Lag Bolt with Expansion Shield

Lag Bolt with Fiber Plug
Lag Bolt with Lead Shield
Machine Bolt Assembly

Machine Bolt with Expansion Shield

Threaded Rod Assembly
Toggle Bolt Assembly

## **SCREWS AND NAILS:**

Cement Nail
Common Nail
Finish Nail
Hook Nail
Machine Screw
Masonry Nail

Spike

Wood Screw

#### **METAL BRACKETS:**

Joist Hanger Post Anchor

Post Cap Tie Plate

Strap Hanger Plate Anchor

## **MISCELLANEOUS FASTENERS:**

Construction Adhesive

Drive Anchor Duct Tape Epoxy

Masonry Wall Tie

Mastic Mortar Rivet Snap Tie Solder Staple Z-anchor

## **REINFORCEMENT:**

#3 Rebar #4 Rebar #6 Rebar #8 Rebar Cavity Wall Tie Fiber Mesh

Geosynthetic Reinforcing Grid

Steel Dowel

Truss Design Reinforcement Welded Wire Mesh (WWM)

# Materials List (for Section 3 and 4)

The following is a list of materials that may appear in questions in Section 3 and/or 4 of the L.A.R.E. This list has been prepared by the CLARB Examination Committee. While the Committee believes this list will be of assistance to you in preparing for the L.A.R.E., no representation is made that a complete understanding of the materials on this list will ensure a passing grade on the examination, and no representation is made that the examination questions will be limited in scope to the list shown.

Angle Iron Joint Sealing Compound

Asphalt (Bituminous Concrete) Mastic **Brass Pipe** Metal Sleeve

**Brick** Mortar **Butt Hinge** Mulch

Caulk Perforated PVC Pipe Ceramic Tile Polyethylene Pipe Concrete Porcelain Enamel Concrete Masonry Units (CMU) **Portland Cement** 

Prefabricated Wall Drain **Concrete Pavers** 

**PVC** Pipe Copper Pipe Sand **Epoxy Sealer** Soil **Expansion Joint Material** 

Filter Fabric Soil Cement

Flagstone Steel Tubing - Round Flashing Steel Tubing - Square Flat Steel Steel Washers

Floor Drain Stone

Foam Insulation Stone Dust (Fines)

Galvanized Electrical Conduit Strap Hinge Gate Latch Assembly Stucco Geotextile grid Tar

Granite Wall Reinforcement

Gravel (crushed stone, granular Waterproofing (Bituminous)

material, aggregate, peagravel) Waterstop Grout (non-shrink) Wood (Lumber) Wrought Iron

# **Lumber/Timber List (for Section 4)**

The following is a list of lumber/timber that may appear in questions in Section 4 of the L.A.R.E. This list has been prepared by the CLARB Examination Committee. While the Committee believes this list will be of assistance to you in preparing for the L.A.R.E., no representation is made that a complete understanding of the materials on this list will ensure a passing grade on the examination, and no representation is made that the examination questions will be limited in scope to the list shown.

1x4 [25x100]

1x6 [25x150]

1x8 [25x200]

1x10 [25x250]

1x12 [25x300]

5/4x6 [30x150]

2x2 [50x50]

2x4 [50x100]

2x6 [50x150]

2x8 [50x200]

2x10 [50x250]

2x12 [50x300]

4x4 [100x100]

4x6 [100x150]

4x8 [100x200]

4x10 [100x250]

4x12 [100x300]

6x6 [150x150]

6x8 [150x200]

8x8 [200x200]

# **Wood Member Sizing Chart (for Section 4)**

The following are charts that may appear in questions in Section 4 of the L.A.R.E. This material will be mbedded within any question that requires use of the chart.

# For external wood structures with uniform joist and beam spacing.

#### **Maximum Allowable Spans for Spaced Boards**

	Laid Flat			
	1 x 4 [25 x 100]	5/4 x 6 [30 x 150]	2 x 4 [50 x 100]	2 x 6 [50 x 150]
For Decking	12" [30cm]	16" [40cm]	24" [60cm]	24" [60cm]
For Benches	NA	NA	36" [100cm]	36" [100cm]

## **Maximum Allowable Spans for Joists**

Joist Size	Joist Spacing	Joist Spacing			
	16" [40cm]	24" [60cm]	32" [80cm]		
2 x 6 [50 x 150]	10' [3.0m]	8' [2.4m]	6' [1.8m]		
2 x 8 [50 x 200]	12' [3.6m]	10' [3.0m]	8' [2.4m]		
2 x 10 [50 x 250]	16' [4.8m]	14' [4.2m]	10' [3.0m]		

#### **Minimum Beam Sizes and Allowable Beam Spans**

Spacing Between Beams	4' [1.2m]	6' [1.8m]	8' [2.4m]	10'[3.0m]	12'[3.6m]	
	_	_	_	_	_	Beam Size*
	6' [1.8m]	6' [1.8m]	_	_	_	4 x 6 [100 x 150]
	10' [3.0m]	8' [2.4m]	6' [1.8m]	6' [1.8m]	_	4 x 8 [100 x 200]
	12' [3.6m]	10' [3.0m]	8' [2.4m]	8' [2.4m]	6' [1.8m]	4 x 10 [100 x 250]
	12' [3.6m]	12' [3.6m]	10' [3.0m]	10' [3.0m]	8' [2.4m]	4 x 12 [100 x 300]
	Maximum Distance Between Posts (o.c.)					

<sup>\* -</sup> Two (2) 2 by's [50's] are acceptable.

NOTE: Maximum cantilever for joists and beams is 24" [60cm].

## **Subsurface Drainage**

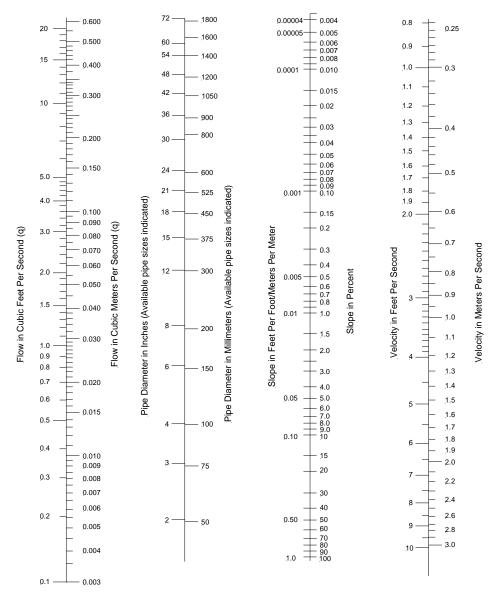
The following information may appear in questions used on the L.A.R.E. in order to answer items pertaining to site drainage systems.

## Rational Method formula:

q=CiA [q=CiA/360]

- q = Quantity of runoff in cubic feet per second [cubic metres per second].
- C = Runoff coefficient.
- i = Intensity of rainfall in inches per hour [millimetres per hour].
- A = Area in acres [hectares].

Nomograph for Circular Pipes Flowing Full (Manning's Equation - Concrete Pipe n=0.013) (for Section 4)



# **For Additional Information**

For additional information on the L.A.R.E. or any other service CLARB offers, please visit the <u>CLARB website</u> or contact us:

The Council of Landscape Architectural Registration Boards 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

> info@clarb.org (571) 432-0332

# **Frequently Asked Questions about the Exam Procedure**

- Q. How do I register for the exam?
  - A.- All candidates will register for the exam via the <u>CLARB website</u>.
- Q. How do I know if I am eligible to take the L.A.R.E.?
  - A. You can verify your eligibility via the CLARB Eligibility Map on the CLARB website.
- Q. Why is the Council Record part of the exam registration process?
  - A. Starting a Council Record during the exam process ensures that CLARB is collecting, verifying and storing the information that licensure boards need from you in order to apply to take the exam and be evaluated for licensure. The licensure process is simplified when candidates and licensure boards use the Council Record. The Council Record is not just your exam application. It is the field-recognized and preferred tool for tracking all of your professional accomplishments and can be used at every step of your career.
- Q. Do I have to "complete" the Council Record during the exam registration process?
  - A. Candidates who need to obtain pre-approval should start and complete the Record so they can transmit their Record to their licensure board for approval. (Exam candidates may transmit their Record for free in support of exam application.) Candidates who do not need to obtain pre-approval only need to start the Council Record and submit their education information prior to testing. The remainder of the Record can be completed during testing so that it can be used in support of initial licensure application upon completion of the exam.
- Q. Can I take some sections in one state or province and the remainder in another?
  - A. Eligibility to take the L.A.R.E. varies by jurisdiction. You will want to verify your eligibility prior to moving from one jurisdiction to another.
- Q. Why can't exams be offered year-round now that they are on computer?
  - A. CLARB has a limited bank of items and to maintain security and ensure accuracy and fairness in testing we can only offer the exam in a few windows during the year.
- Q. Am I able to take water or food into the testing center?
  - A. You are not permitted to bring anything into the actual exam delivery room with you, but you are permitted to take breaks so that you can get a drink of water or a snack from your locker. Be sure that all items are in clear packaging free of any labels or markings.

- Q. Are practice tests available for all sections of the exam?
  - A. Due to the fact that CLARB produces the examination which is used by licensure Boards to determine qualifications for licensure, CLARB does not provide preparatory information to assist candidates in passing the examination. CLARB has partnered with ASLA to provide materials to help prepare for the exam and you can find a link to the ASLA materials in the preparation section of our website.
- Q. When should I arrive at the test center?
  - A. Plan to arrive at least 30 minutes before the scheduled appointment to allow time for checkin procedures. Candidates who arrive late will NOT be allowed to take the examination.
- Q. When will I get my exam results?
  - A. Your exam results will be posted on the CLARB website approximately 6 weeks following the last day of the administration. CLARB will notify candidates via email and social media when exam results are available.
- Q. Can I bring a handheld calculator to use during the examination?
  - A. No. The Pearson VUE test center will provide a calculator when you check-in for the exam. If you are not provided a calculator upon entry to the testing room, be sure to request a calculator for the examination. Should the proctor indicate that you are not permitted a calculator, ask them to contact CLARB immediately.
- Q. Can I bring paper and pencil to the test center to sketch on to help me answer the questions?
  - A. No. You are not permitted to bring anything into the test center. A notebook and marker will be provided for you by the test center.
- Q. Can I cancel the exam?
  - A. CLARB has a cancellation policy that requires candidates to cancel their exam prior to the posted cancellation deadline. For details on the CLARB cancellation policy, please visit the <u>"Exam Dates & Deadlines"</u> page of the CLARB website.
- Q. What happens if I miss my examination due to a family emergency?
  - A. Candidates can apply for a refund under the CLARB Good Cause policy. CLARB's "Good Cause" policy may apply if you are unable to attend the exam administration due to severe physical or emotional hardship. Contact CLARB to find out what documentation you need to submit to have your case reviewed in accordance with this policy. Candidates who are approved under this policy will receive a refund to the original form of payment less a 5% cancellation fee. All requests for Good Cause must be received within 60 days of the exam administration.

- Q. What do I do if I am not permitted to test by Pearson VUE employees for any reason?
  - A. Immediately contact the CLARB office and explain your situation. CLARB staff may be able to remedy the situation if contacted immediately. Do **not** leave the test center.
- Q. What do I do if I experience an issue such as a computer software problem that does not allow me to complete the exam?
  - A. Report the incident to the onsite Pearson Vue staff immediately. Be sure to follow up with CLARB regarding the incident. CLARB staff may be able to remedy the situation if contacted immediately.

#### **Q&As About Exam Items**

- Q. How will I be tested on orientation of elements in a drag and place item?
  - A. The elements in a drag and place item cannot be manipulated in any way. To test on orientation, you would have multiple elements in different orientation and would need to select the appropriate element and place it on the site (i.e., one tennis court oriented N/S and one oriented E/W).
- Q. On a drag and place question, if I am required to place two elements, but only get one correct how will I be scored?
  - A. Each question is worth one point and you need to get the entirety of the question correct to achieve a point. If you placed only one of the two elements correctly, you would receive no point for that question.
- Q. Are there multiple correct answers for the advanced item types?
  - A. The item writer creates a scoring "area" for the element that relates to the appropriate location for that element. The location can be very specific (only one correct location) or very generic like anywhere in soil type A.
- Q. If my drag and place element is 75% or so within the scoring area, will I get a point for that item?
  - A. Any margin for error is already built into the scoring area by the item writer. The entire element must fit fully within the scoring area to receive credit.
- Q. Are all questions on the test of the same value?
  - A. All questions, no matter the type, are worth one point each. For example, a drag and place item that requires you to locate six elements is the same value as a multiple-choice item that requires one answer choice one point.
- Q. How are multiple response items graded? If I select three items correctly and there are supposed to be four, do I get any credit?
  - A. In all item types, including the multiple response, you must get all of the answers correct to get one point. There is no partial credit given if a portion of the answers are correct.
- Q. How are wood sizing questions going to be handled? Are you going to include the wood sizing chart within the problem?
  - A. All supporting material needed to answer an item will be included either on the item screen itself or within a pop-up "exhibit" window accessible through the "Show Exhibit" button found in the upper left portion of the item.

- Q. I understand that measurement in feet or meters will be replaced with "units" in the advanced item types. Will units be used in all of the items?
  - A. Some of the multiple-choice items and multiple response items that test on codes like accessibility codes may have measurement in Imperial and metric. The item will include Imperial measurement (i.e., feet, inches) and metric measurement in brackets (e.g., [2.3 m]).
- Q. What if I drag a contour in a drag and place item and it does not match up exactly with the existing contours?
  - A. Contour locations need to be fairly accurate, but the item writer does provide a margin for error due to the nature of placing the element with a computer mouse.